APPENDIX

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1. (Currently amended) A network device, comprising:

cipher communication means for performing cipher communication with a group of network devices using a common encryption key that is mutually authenticated by the group of network devices;

group management means for managing the group of network devices in the performance of said cipher communication using said common encryption key;

storage means for storing cipher communication information including said common encryption key and identification information identifying the network devices of said group;

acquisition means for receiving a first external storage medium and acquiring cipher communication information from said first external storage medium, said cipher communication information enabling said network device to perform said cipher communications with said network devices of said group,

wherein said group management means comprises:

means for adding an identification of the network device to said cipher communication information acquired from said external storage medium and for storing said cipher communication information into said storage means,

means for sending identification information of the network device, as a group participation notification, to said group of network devices when said first external storage medium is mounted and said cipher communication information is not stored in said storage means; and

means for receiving a group participation notification and for adding identification information included with said received group participation notification to said cipher communication information stored in said storage means, and

wherein said cipher communication means performs a cipher communication between network devices in said group according to said identification information included in

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said cipher communication information stored in said storage means using said common encryption key.

> 2. (Currently amended) A network device according to claim 1, wherein said group management means further comprises:
> means for notifying each network device of said group of a withdrawal by the network device from cipher communication with said group according to the identification information stored in said storage means, and deleting said cipher communication information from said storing means when a second external storage medium having no cipher communication information stored thereon is mounted at the network device; and
> means for deleting identification information associated with a first network device in said group of network devices from said cipher communication information stored in said storage means when a notification of withdrawal of said first network device is received through said cipher communication means.

> 3. (Currently amended) A network device according to claim 2, wherein:
> when the first external storage device is mounted, said group management means compares group identifiers corresponding to cipher communication information stored on the first external storage device with group identifiers of cipher communication information stored in said storage means and copies said cipher information stored in said storage means to said first external storage device if a match is detected between the respective group identifiers.

> 4-5. (Canceled)

> 6. (Currently amended) A group management method for network devices belonging to a group of network devices which perform cipher communication via a network, the method comprising:
> a group generation step, performed when a first external storage medium is mounted at a first network device belonging to said group of network devices and said first network device does not hold cipher communication information, in which the first device

generates an encryption key used for said cipher communication, and holds, as cipher communication information, said encryption key and network device identification information and copies said cipher communication information to a first external storage medium allocated to the group of network devices;

a first group participation step, performed when the first external storage medium which stores cipher communication information is mounted at the first network device and said first network device does not hold cipher communication information, in which said first network device sends identification information as a group participation notice through said cipher communication to devices of said group, and adds identification information of the first network device to said cipher communication information acquired from the first external storage medium and holds said cipher communication information;

a second group participation step, performed when the first network device receives a group participation notice comprising identification information from another network device in said group of network devices, in which the first network device adds said received identification information to said cipher communication information;

a first withdrawal step, performed when the first network device holds cipher communication information and a second external storage device which does not hold cipher communication information is mounted at the first network device, in which the first network device sends information indicating its withdrawal from the group and identification information to all other devices in said group based on identification information stored at said first network device in said cipher communication information, and thereafter deletes said cipher communication information; and

a second withdrawal step, performed when said first network device receives information indicating that another network device in the group of network devices is withdrawing from cipher communications, in which said first network device deletes the identification information corresponding to said another network device from the cipher · communication information held by the first network device.

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7. (Currently amended) A computer-readable storage medium which records a program for making a first network device perform cipher communication with a group of network devices via a network, the program comprising steps of:

generating an encryption key used for cipher communication with the network devices of said group, storing, as cipher communication information, said encryption key and network device identification information, and copying said cipher communication information to a first external storage medium when the first external storage medium is mounted at the first network device and said first network device does not hold cipher communication information;

sending identification information as a group participation notice through said cipher communication to said devices of said group, adding identification information of the first network device to said cipher communication information acquired from the first external storage medium, and holding said cipher communication information at said first network device when the first external storage medium which stores cipher communication information is mounted at the first network device at a time when said first network device does not hold cipher communication information;

receiving a group participation notice comprising identification information from another network device in said group of network devices, and adding said identification information received from said another network device to said cipher communication information held at said first network device;

sending information indicating withdrawal of the first network device from the group of network devices to all other devices of said group when the first network device hold cipher communication information and a second external storage medium which does not hold cipher communication information is mounted at the first network device; and

receiving information indicating that another network device in the group of network devices is withdrawing from cipher communication, and deleting identification information corresponding to said another network device from the cipher communication information held by the first network device.

8. (Currently amended) A network device according to claim 1, wherein:

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when the first external storage medium, which stores said cipher communication information, is mounted and cipher information is stored in said storage means, said group management means copies the cipher communication information stored in said storage means to said first external storage medium.

9.-14. (Canceled)

15. (Previously presented) A network system comprising a plurality of network devices, and a network that connects said plurality of network devices, wherein:

each of said plurality of network devices is a network device according to claim 8.

16. (Previously presented) A network system comprising a plurality of network devices, and a network that connects said plurality of network devices, wherein:

each of said plurality of network devices is a network device according to claim 1.

17. (Previously presented) A network system comprising a plurality of network devices, and a network that connects said plurality of network devices, wherein:

each of said plurality of network devices is a network device according to claim 2.

18. (Previously presented) A network system comprising a plurality of network devices, and a network that connects said plurality of network devices, wherein:

each of said plurality of network devices is a network device according to claim 3.